Introduction:

Welcome to CleanLaw, from the Environmental and Energy Law Program at Harvard Law School. In this episode, EELP Founding Director and Harvard Law Professor, Jody Freeman, speaks with Mary Nichols, former Chair of the California Air Resources Board and California's Secretary for Natural Resources, as well as former Assistant Administrator for EPA's Office of Air and Radiation. They discuss California's pivotal role in creating US clean car regulations under multiple administrations, how automakers and market forces have evolved since the 1970s, and what may happen in the coming years under either election outcome. We hope you enjoy this episode.

Jody Freeman:

Mary Nichols, I am delighted to welcome you to CleanLaw. Thank you so much for joining us.

Mary Nichols:

It's a pleasure to be here.

Jody Freeman:

Before I launch into our discussion of everything related to cars, clean air in California, and US climate policy, let me give a little bit of background about who you are. I think almost everybody listening to this podcast would know who Mary Nichols is. Mary's a legendary leader of the California Air Resources Board. I want to say, Mary, you led it starting in 2007, almost uninterrupted since then until a couple of years ago. Is that right?

Mary Nichols:

Yes, 13 years at one go. The prior one was a few years before that.

Jody Freeman:

So you had a first stint and then a long second stint, and you played this role as really the top air regulator in California under three separate governors, which is a unique accomplishment, and it suggests exactly how critical you are to clean air policy that governors of different parties were very keen to have you in this leadership role. You're known as one of the most important historical regulators of the auto sector in particular in your leadership role at CARB. I know you have a long career that included other things, including a stint as the Assistant Administrator for Air and Radiation at the US Environmental Protection Agency. So you have many more credits on your resume, but you are really most famous for your role as the leader of California's policy on clean air and climate. Give us a sense, Mary, of your own view of your trajectory and your marvelous career. How did this all start? How did you get where you landed? And what do you make of it now looking back?

Mary Nichols:

Well, maybe I should start by saying that my father, who was a professor of electrical engineering at Cornell, when he found out that Jerry Brown was appointing me to an agency in California that had something to do with regulating cars expressed a certain amount of horror along with pride, because he remembered having tried to get me through seventh grade general science at Ithaca High School and how hard that had been. I was not exactly a science person, I was always the literary type. And although I did own a car by the time I was 18, a very ancient Chevrolet that I loved dearly, I wouldn't say I knew anything about what was under the hood at that point.

So, it was sort of a long journey to becoming someone who actually had some influence over the fate of cars. We both learned a lot about cars and how the role of the auto industry as the agent or one of the principal agents of air pollution and climate change in the world, fell into the realm of something that a person who was mostly interested in law and policy and the environment, and how we came together in the end to do something really important.

Jody Freeman:

Well, you grew up in upstate New York. You went to Cornell. And then you wound up here at Harvard Law School.

Mary Nichols:

That's true. I did.

Jody Freeman:

For a time. And you wound up then that Yale Law School for more of your-

Mary Nichols:

Correct. My degree came from Yale.

Jody Freeman:

And then you went out to California, and what did you do in the first part of your career out west?

Mary Nichols:

Well, I was lucky enough to land a job with a brand new public interest law firm that was one of a handful of organizations that the Ford Foundation funded, which included NRDC and the Environmental Defense Fund and the Center for Law and Social Policy in Washington. It's like a major explosion of young lawyers coming out of top law schools who were going to change the world by representing interests that had not previously been represented, primarily the environment. And so Los Angeles had a group that was comprised of four guys who were all leaving positions at O'Melveny & Myers to start up their firm. And I talked my way into a job as a law clerk while I was studying for the bar, and convinced them that I could raise enough money to fund my position. And I did. And we did.

Jody Freeman:

And how did you get from there though, in private practice presumably, to this sort of regulatory role that you ended up taking on at the California Air Resources Board?

Mary Nichols:

Well, the role of the center was to sue government agencies to try to force them to do their job the way we thought they should be doing it, which included things like forcing the end of building of a major freeway that was going to tear through a low-income, mostly Black community, and also add a lot of air pollution in South Los Angeles. And so when Jerry Brown was elected governor as the youngest governor in California history, at that point, he went out looking for people who had been suing the government under his predecessor, Ronald Reagan. And he brought quite a few of us into office, actually.

Jody Freeman:

So this is the early seventies, right? And this is sort of the first few years of implementing the Federal Clean Air Act, which had been passed in 1970. And California has a special role under the Clean Air Act, which dates to it being the state that was leading pollution regulation at the time the Clean Air Act was adopted. Can you talk a little bit about the importance of California and its leadership role? I'll just mention quickly that the central provision that gives California the special role says that California alone among the states can set its own vehicle emission standards. And this was an acknowledgement that California had done this before anybody else through the fifties and sixties. And so the Clean Air Act acknowledges that, and says they can set their own vehicle emission standards as long as they're as stringent or more stringent than the federal standards, and that other states can adopt California standards. And the law doesn't even mention California. It just says the state that was doing this by 1964, which is very interesting. Can you talk about this special role that California had and still has?

Mary Nichols:

Well, absolutely. In many ways when I think about what I've been able to accomplish throughout my working life, defending and maintaining California's unique regulatory status is maybe the most important thing of all. I wasn't there at the beginning. That was a role that went to California state leadership. California threatened to withhold its votes from the Clean Air Act in 1970, if they didn't get that provision. And it was a major defeat for the auto industry, which came along with the Clean Air Act and agreed to it on the grounds that they could perhaps among their primary goals really was to get beyond state regulation to preempt at all. And so the fact that California was allowed to continue doing what it was doing was a defeat for them. But at the end of the day, as you know, they have actually not only become reconciled, but in many ways have come to support California's role as a regulator, which I think shows a lot about how times have changed and how institutions can change depending on other circumstances.

But for California, the car was the reason why the Air Resources Board was created in the first place, it was recognition right after World War II, and then growing over time that it was the growth of people and particularly of cars that was causing what were then known as Killer Smogs in Los Angeles. When you had many days when there was very little visibility in downtown Los Angeles, you couldn't see the mountains that people's eyes would sting from whatever was in the air, and people got to the point where they just didn't want to take it anymore.

Jody Freeman:

It's interesting because nowadays, I think younger generations, let me say, don't really remember or have no knowledge of this history of really terrible air pollution that was causing asthma, a lot of morbidity and mortality illness. And as you say, Mary, just became untenable. And it led to legislation like the Clean Air Act and it seems to work for the Clean Water Act, rivers bursting into flames because of pollution. And nowadays, we sort of take for granted a certain level of health protection, air quality, water quality, that I hope people will come round again to really appreciate.

Mary Nichols:

I was just in Cleveland for a climate event, which was actually hosted by the mayor of Cleveland who cited the episode of the Cuyahoga River catching fire, which is the landmark that led to the passage of the Clean Water Act. And they have come to embrace that history and to brag about it because of how far they've come.

Jody Freeman:

Well, let's talk about getting from here to there, especially with the auto industry. If you were to just wake up today and look around, you would see an American auto industry that largely has committed itself to a

transition to electric vehicles, made very public commitments about the billions of dollars they're investing. We see new battery plants and new interest in trying to domestically source the components of cleaner vehicles. We also see lots of federal policy around electrification, the Infrastructure bill from 2021, that's funding charging infrastructure, the Inflation Reduction Act that Congress passed, which gives tax credits to consumers to buy electric vehicles. So we have both the incentives on the supply side to build infrastructure. We have the incentives on the demand side to purchase these vehicles.

If you were to wake up today and see all this, knowing none of the history, you'd think, oh, well, what an enlightened country and very interested in reducing emissions from the transport sector, right? Which is the biggest contributing sector to greenhouse gas emissions. But Mary, take us back to when none of this was true, and talk a little bit about the early days of setting pollution standards in California when the auto industry was really quite opposed.

Mary Nichols:

Well, first of all, our ideas about cars and what could be done to clean them up were relatively primitive to the way we're thinking about them today. I think our whole view of the industry and of its products is a lot broader and more comprehensive than it was. But if you go back to just the passenger cars and the clogging in the streets in downtown Los Angeles with smog, the industry initially was in denial that they had anything to do with it. So back when the Air Resources Board was first created, it came on the heels of a long period of correspondence between the Los Angeles County Board of Supervisors, a legendary supervisor by the name of Kenny Hahn, who started writing to Detroit. And his collected correspondence with the General Motors is part of the history books. But the bottom line was that the industry denied that it was their fault.

And even after they recognized that they were going to come under regulation, they still tended to blame the fuels that they were burning more than their own designs. But when they did accept the idea that they were going to be regulated, they put serious effort into not only meeting the standards, which they pretty much always did, but also into trying to make sure that the standards that were adopted were technologically feasible. And that is language that's in the Clean Air Act by the way. I think part of the compromise, if you will, that came with a very beginning was that they would accept regulation in return for not being threatened with being banned or not being able to sell cars at all.

And so there was this unspoken agreement really, that the regulators would pay attention to how cars actually are designed and built, what's possible, what can be done, and that the enforcement regime would also be fair so that those companies who might be tempted to cheat would get caught, and those who were complying would know that there was going to be some punishment if people were trying to get around the rules.

Jody Freeman:

There was always this complicated regulatory structure. People like me who work in the area of regulation think what an interesting combination. We have the Clean Air Act on the one hand, and US EPA setting national pollution standards for cars and trucks. We have this carve-out authority for California to set their own stricter standards, which California historically has always done getting this preemption waiver to do it. We have a handful and a growing handful of states copying California as they're allowed to do, adopting their standards.

You have a two-car nation in a way. The standards that apply everywhere except California and the so-called Section 177 states. And then on top of that you have NHTSA, the National Highway Traffic Safety Administration, that under a different law, a conservation law from the 1970s sets fuel efficiency standards that everybody knows as CAFE standards. That's a lot of regulators in the mix for the auto industry. Can you reflect a little bit on how that works or hasn't worked in the past and how you manage that as a regulator yourself in California?

Mary Nichols:

Sure. The ability of other states to actually adopt California's vehicle emission standards wasn't part of the original 1970 deal.

Jody Freeman:

But it wasn't added until later.

Mary Nichols:

It didn't come on until later amendments. It was added in later amendments because the other states or a number of other states, especially in the northeast, were clamoring for that because under their requirements to meet the federal air quality standards, they knew that they weren't going to be able to make it without cleaner cars. And so the only way they could be assured of getting them would be if they could adopt and enforce California's standards. Other states got California's cars anyway, and nowadays some of them are actually suing to prevent that from happening because they see that the auto industry, once they start building a particular type of vehicle to meet the California standards, isn't going to only sell them in California, but in fact will make them available to dealers and customers everywhere.

That piece of how California's regulatory authority works, I think has had more influence than even we would've thought in the beginning. And in fact, it became a bit of a problem in terms of our dealings with the industry because they could argue reasonably enough that the costs of meeting our standards weren't going to extend only to California. They were going to be borne by them in other places as well.

Jody Freeman:

Which amounts to like 40% of the car market by the time you're done.

Mary Nichols:

Correct. Now about 40% of all the cars that are sold in the US are under California standards. But we also increasingly came into conflict with the fuel economy standards and regulatory regime of the federal government, which does preempt any kind of state regulation at all of a fuel economy. And so there's a lot of litigation around the question of whether an emissions standard that requires, inevitably requires technologically improvements in fuel economy to meet that standard, whether that is a regulation of fuel economy or not.

Jody Freeman:

This is the old conflict that there are plaintiffs trying to argue that the EPCA regime, the statute that governs fuel economy, it has this language in it that says anything related to fuel economy is preempted. And there's this argument that somehow the Clean Air Act allowing California to set pollution standards for cars runs up against this because it's relating to fuel economy. There are lots of petitioners who would like to see the Supreme Court take that up. And in a way, what they're really hoping for is to knock out California's special waiver authority.

Mary Nichols:

Well, yes. Although I would say there's also some interest on the part of, maybe it's not always explicit, but the industry has been pretty clever over the years about trying to play off NHTSA and the CAFE standards against environmental and air pollution emission standards particularly. And when I was at EPA in the Clinton administration, they were very actively pushing to have not just California, but EPA be prohibited from moving forward with stricter air quality standards because of their commitment and their allegiance to the CAFE laws.

Jody Freeman:

This is an ongoing saga over the relationship between this pollution control role that EPA has, that California also has taken on and this fuel efficiency role that NHTSA historically has had. And I think climate change is a very important development in all of this because climate change led to the EPA taking a stronger leadership role in the regulation of greenhouse gases.

Mary Nichols:

Yes. Which also started in California.

Jody Freeman:

Yes. I want to talk about that, but I want to make sure listeners understand the sort of trajectory here. Once the Supreme Court in 2007 said that yes, GHGs greenhouse gases fall under the jurisdiction of the Environmental Protection Agency, now the agency can regulate them. And that means that there is even more potential overlap between EPA and NHTSA regulating the transport sector. Take me back to California was the first to regulate GHGs from cars. Talk a little bit about your use of that authority to get at climate change.

Mary Nichols:

We had the authority to deal with the emissions of greenhouse gases because of specific legislation that was passed in the state of California under the leadership of a brand new assemblywoman by the name of Fran Pavley, who was approached by an upstart environmental organization that suggested that this was something that California could do and should do because of the seriousness of global warming and the fact that basically nothing was being done from a legal or regulatory perspective at that point, nothing with any teeth. And she convinced the leadership first in the Assembly and then in the Senate to support legislation that gave the California Air Resources Board, which was the logical regulator in this case because it was already setting standards for conventional air pollution from cars.

So, they added for this purpose that CARB would also be able to regulate anything that was contributing to global warming. That legislation was bitterly and ferociously fought by industry and litigation held it up actually for several years. While it was wending its way through the courts, the agency did not try to enforce standards. They adopted standards but then suspended them in order to avoid being forced to suspend them and it played itself out in the courts. And eventually California won. But it was considered at the time to be a wild-eyed idea that couldn't possibly work. And of course, eventually it was picked up by the US EPA and it has worked.

Jody Freeman:

And in those days, I think we're talking about a period of time, 2006, '07, and I think the George W. Bush administration denied California its waiver authority to regulate greenhouse gases.

Mary Nichols:

Correct.

Jody Freeman:

This is when that administration was also claiming that the EPA had no such authority itself under the Clean Air Act. And then one governor, Arnold Schwarzenegger decided to contest this. And this is interesting because this is a Republican governor. Can you talk about those days with Schwarzenegger's leadership?

Mary Nichols:

Well, this is part of the history of California always fighting for the right to regulate anything that causes air pollution. I was not working for Governor Schwarzenegger when he was first elected. In fact, he came in as a result of a recall election, which took out Gray Davis. And at that point I was actually serving as California's secretary for natural resources and was involved very happily in passing big park and water bonds and acquiring public lands and thinking about how we could do more to deal with the marine protected areas off of our coast.

But I was actually at UCLA running an interdisciplinary environmental institute when Schwarzenegger decided he wanted to get serious about climate policy. There was a brief kerfuffle when he dismissed my predecessor, Bob Sawyer, who was a good friend and a former professor, very distinguished professor from Berkeley specializing in combustion. And I came back to run that program. But before I got there, the governor had made a well-publicized photograph trip to Washington DC to show up in the office of the then administrator of EPA and demand that California be given its waiver. But the Bush administration wasn't about to change its mind. And it wasn't until Bush was replaced by President Obama that we actually got the waiver.

Jody Freeman:

And so there's a little personal note I want to make here. I came to know you during your time at UCLA. I was a young UCLA law professor. You were running the Institute of the Environment. And I came to know you and you were just very supportive of a young law professor, particularly women at the time. And we got to know each other. And I always remember that because we also had a chance during the re-elect of President Bush during the election night, you and I found ourselves driving across New Mexico on Tribal lands doing poll monitoring during the election, believe it or not.

And I don't even know if you remember this, but somehow we managed to do this together and we were ready to call the Department of Justice if we saw any irregularities and we were doing this. And then in the end, he won. And there was this get-together among friends in New Mexico. And I was quite despairing about this turn of events and thought everything was so negative and what were we going to do? And I remember, Mary, you gave a little pep talk, you gave a little speech to me. And do you remember what you said? Because I feel like you probably play this role quite a bit.

Mary Nichols:

I don't remember the precise words, but I'm sure it was something along the lines of, this is terrible and I'm very sad that Bush is going to continue to be our president, but for the issues that you and I care about, this is not the end because we are on the right side here. We are doing work, that's what the people want, and we're going to find a way to win no matter what.

Jody Freeman:

Exactly. It was a very optimistic, upbeat talk for which I will forever be grateful. And then you and I also managed to interact because I spent a little bit of time in the White House in the early days of the Obama administration, and we were working on trying to, first of all, give California back its waiver was step one. EPA did that, and then set tougher standards to address the first ever greenhouse gas standards at the federal level, and do it in a way that would take advantage of what California had already done, as you described under the Pavley initiative, and bring together CARB, US EPA and the Department of Transportation into one set of national standards that the auto industry would agree to support.

That was a big initiative. California was central to getting that done. And we were really proud to have accomplished that. We thought it was the first step to setting a national set of greenhouse gas standards that would end up moving in the direction of electrification. We thought of it as the first move. And now today

we're in a very different place. Can you talk about the Obama administration and how you in California felt about that process and your perspective on it?

Mary Nichols:

Well, of course we were exhilarated because President Obama had, as a candidate, already pledged that he would give California its waiver back. And we were quite confident that he would live up to his word. We were excited when he assembled the team in the White House, which included you and Carol Browner to make that happen, but also to do something more important, which was to create a national standard. And we were both proud but also nervous because the federal government inevitably with its broader reach and resources, was probably going to do something that might actually jeopardize California's position if we weren't extremely careful. We were nervous about the fact that there were conversations going on, which California was not always in the middle of, not always privy to. And we also realized by the end of this process that we were going to have to find a way to walk back from our standards to get a broader national standard.

And what that meant was that we had to make sure that the national standards, in fact, could demonstrably achieve as good or better a result as if California had been allowed to go its own way, but without a national standard being in place. And this was a tough issue, both from a technical perspective, but even more so from a political perspective, because you could imagine that having fought for California's standards, it was not going to be easy to convince Arnold Schwarzenegger that he could accept a federal standard, which on its face looked weaker than the California standards. And so my job was to find a way to make that happen.

Jody Freeman:

And I remember these very delicate negotiations over all of these issues, and we came up with some good language around California agreeing that compliance with the federal standard would satisfy California's own standards.

Jody Freeman:

And we sort of finessed all of these very difficult issues, and I think this was a step forward. Although I hear you about this very strong desire to always preserve California's waiver authority as a backstop, and you guys successfully did that.

Mary Nichols:

We got that

Jody Freeman:

And that was a really important piece.

Mary Nichols:

It was, but also, I've got to say, it took some stepping back and sort of reframing the issue in the sense that there's always a temptation to confuse the kind of pollution that comes from the tailpipe of cars that does poison people at a high enough level versus the gases that are contributing to a global problem. By their nature, they are not localized in their impact. And so we could be and I believe California is proud of its role in helping to do something that benefits the planet as a whole.

Jody Freeman:

Let me fast-forward you to now. I really want to get your perspective on the auto industry. I'm not sure what you think of the strength of their commitments or sort of a general consensus of half of new vehicles by

2030 or so being electric vehicles. Certainly the Biden administration has committed to those kinds of numbers, but the industry itself has come out with those kinds of commitments. And I just want to get your perspective on how you evaluate the seriousness of this.

Mary Nichols:

The commitment to electric vehicles has come about, I think, on a realization on the part of the industry that the future does lie in zero emission vehicles, at least vehicles that don't run on conventional petroleum products. And that as a global business, which they now are, they're going to have to find ways to satisfy that need. I don't think they ever were unwilling to build electric cars in the sense that inside the big companies we know there was always an interest on the part of the powertrain engineers.

The people who actually think about what would be a cool car in building electric cars. They were building racing cars that were electric cars for a long time, but they didn't think that there was going to be a market for them, and they certainly didn't think that the infrastructure existed to support that kind of a transformation. So they were deeply, deeply embedded with the model of fuels that are being supplied by oil companies. That has changed and it's changed for a number of reasons.

And certainly recognition of government policy is a big part of that, but it's also, I think a fact that they're trying to look at what their own future is going to be, what kind of business they're going to be in. And no one could survive in a world in which the only market for cars was in the United States. So they're going to have to be looking at what Europe wants from them. They're going to have to look at what Asia wants from them. And as they looked around over the last decade or so, it was pretty clear that there was going to be a strong push towards electric vehicles.

I think another thing that has changed in their thinking about what business they're in is that they see a change in the global population. Where the growth is all in the Global South and the places that they traditionally built and sold cars, Europe and the United States, to a lesser extent, Canada, have aging populations and young people who aren't all that interested in driving, period. So when they look to what the future is going to be, it's going to involve shared vehicles, it's going to involve ride hailing services, it's going to involve different types of vehicles for different types of customers.

And so it's a time of a lot of upheaval. What that means in terms of their commitment to electric vehicles, I think, is that they're all in, but they also have to have the revenue to keep their share prices in a decent position and to continue to sell vehicles. So there has been, as I'm sure everybody has seen, less of a steep growth on sales quarter over quarter than they had hoped for, but those rates were probably not sustainable. And I think that we've seen no pulling back.

And in fact, if you look at what's happening in the market overall as a percentage of sales of vehicles, electric vehicles are holding up extremely well.

Jody Freeman:

Yes. And so even though there they're a small share of the domestic and global market, they're still increasing year over year, really impressive rates.

Mary Nichols:

Once people buy them, they like them.

Jody Freeman:

I always say this, that of course there's some resistance at first because it's unfamiliar, but once you get in one of these cars, I happen to have a Tesla. I mean, it's kind of great. All of these electric vehicles now that are rolling off the assembly lines, many, many models will expose lots of people to different kinds of EVs. And

once you get in them, you fall in love with them. If they're well-made, it's just delightful and wonderful to drive, and there's sort of no going back, but you have to get over some of the stuff...

People experience range anxiety. They worry that their batteries won't last long enough, and then they learn that they're very capable of driving them, for the most part, the distances that they need to go and so on. And then we have infrastructure coming. You have Congress actually investing in charging infrastructure and many states doing it, at the same time as you have incentives to consumers to help reduce the price of these electric vehicles through tax credits and the manufacturers, the auto companies are getting the benefit of all of this policy to help them.

So you have government rowing in the same direction as industry, as you said. That is now realizing it's going to have to be globally competitive and the competition is moving to electric vehicles. So this is all happening in my view, sort of for the first time that everything's steering in the same direction. Do you see it that way? Does that sound about right?

Mary Nichols:

No, I absolutely see it that way. I think that it's almost like a situation where you're on a war footing when the industry is mobilized. Whether they intended to go there or not, they're all in the fight against global warming. And now their interests are very much in continuing to support all the changes that will make the sales of these new vehicles work around the world. And they're concerned about other legislation that might interfere with their ability to build new battery plants or to take advantage of the latest technology.

So there are a lot of winners in this field. There are new companies rising up to maintain the new electric charging stations. There's small businesses out there figuring out ways that you could have electric vehicles maintained easily and quickly. And on the other hand, there were people who were left kind of wondering what's going on? I happen to drive a Ford Mustang Mach-E. And my Ford dealership doesn't know what to do with me because I don't come in for regular maintenance. I don't need their services. So they're very unhappy about that.

Jody Freeman:

I just want to note for listeners who might not know Mary's car purchasing history, I do. And I can just say you have driven the coolest cars throughout your whole life. I remember your hydrogen-powered vehicle in LA.

Mary Nichols:

That was a lovely car.

Jody Freeman:

Yes. I mean, you would show up and I'd be like, "Mary, what are you driving?" "Well, it's hydrogen." I'm like, "Where do you refuel this car?" And didn't you have to drive to... Where did you have to go to...

Mary Nichols:

It wasn't far. It was in Hollywood. There was a very nice station there. Once I learned how to use the machinery, so I am a person who likes cool cars, I will say, but I can't claim to be a mechanic of any kind. The first time I tried to actually use the pump at the hydrogen station, I needed a bit of help to make that work.

Jody Freeman:

I'm like you, I really like cars. I'm a car person and I happen to find electric vehicles sexy. I'll just say that out loud. And so I think people should give them a try if they haven't yet. Let me ask you this because it's impossible to not try to get your views on the upcoming election. So we lived through a Trump administration

that rolled back these vehicle standards at EPA, that made every effort to weaken other greenhouse gas standards from the power sector and so on. And now the Biden administration has put the pieces back in place heading in the right direction again on climate policy.

So we have a raft of federal standards for transport sector, for cars and trucks going out to 2032, increasing the likelihood of more electric vehicles being part of the mix. So there's no federal mandate to abandon the internal combustion engine, but the standards for greenhouse gases are getting stricter. So there will be a different mix of cars. And over time, we're likely to see many more electric vehicles as a result of these standards. And we also have a whole bunch of other climate policy for other sectors that the Biden administration has put in place.

Now we're looking down the barrel of a presidential election at the prospect of either a Biden re-elect or a Trump two. And I'm just interested in how you think about what the differences will be when it comes to, say, electric vehicle policy. Trump's out on the stump saying he's going to abandon electric vehicle support and so on. What do you think about that? It sounds like you think there's a lot of local and industry support to continue down this path.

Mary Nichols:

There's a lot of local support, certainly for electrification. It has so many advantages for urban areas. And so I think there's going to continue to be a strong coalition of mayors as well as governors in many states that will continue to fight for electric vehicles. Even in Texas, you may not have a state government that likes electric vehicles, but you have consumers wanting to buy them because of the advantages. They really appreciate in many cases what you get in terms of the flexibility of being able to enjoy all that great technology and feel good about the fact that you're not causing problems to the environment maybe, sure.

That could be a motivation, but it's also very nice that you can fill up your car in your own garage or carport if you happen to have one of those. And increasingly, cities, even in red states, are actually getting involved in installing the electric vehicle infrastructure that's needed. So I don't see turning away from that, it could get to be a nasty fight. And I can't predict that the auto companies are all going to turn their lobbying resources only in the direction of supporting the current policies.

I don't know what incentives or disincentives, a hostile administration might be able to come up with, frankly. But it seems to me that the weight of public opinion, the movement of the market is in the direction of support for electric vehicles in general, even if possibly some of the deadlines might waver. Why would a company produce, let's just say, large gas guzzling vehicles if nobody wanted them? If there continues to be a niche market, somebody will certainly do it. But if you see people moving in the other direction, the companies are going to find a way to get there and give them what they want.

Jody Freeman:

I also think there's a potential political coalition to resist a sort of Trump rollback because you've got a lot of the money from the infrastructure bill and from the Inflation Reduction Act pouring into states. Not just blue states, but red states too. A lot of these new factories, battery manufacturing plants and such are in so-called red states. And there will be both potentially not just consumers, but also politicians in those states who might turn out to like the fact that the jobs have been created there and there might be labor support for it.

Mary Nichols:

I agree with you. I think that's how it should be for sure. The first plants that go in to build batteries in the southern states may not be unionized, but I think the UAW will get there and those changes will happen. And I think that will be positive, not just because I'm a Democrat, but because if you look at some of the

Southeastern states where these plants are going to be built, you're going to be providing jobs for people at wages and with conditions that they've never enjoyed in their lifetime. So it's all a positive thing.

Jody Freeman:

The dream is the BlueGreen Alliance, right?

Mary Nichols:

Yes, exactly.

Jody Freeman:

And that you're building political buy-in for climate policy. That's good for economic development, good for labor, good for consumers.

Mary Nichols:

I think that's true. But on the other hand, this is maybe a deviation from my well-known optimism. I'm not able to understand why a Republican who otherwise was interested in economic development would be opposed to electric vehicles. What is that reaction?

Jody Freeman:

I think you're approaching this with logic, Mary.

Mary Nichols:

That's the problem. You're right.

Jody Freeman:

Let me ask you this, because you're a unique figure in the world of environmental protection, clean air. You're often touted as one of the top historical regulators, both wise and politically astute and deeply knowledgeable in addition. You get a lot of credit for your role historically in driving emissions standards and climate policy and leading California.

Jody Freeman:

And I wonder if I can just ask you personally what you think about this career. Are you satisfied? Tell me how you're feeling about it at this stage.

Mary Nichols:

I feel tremendously proud, but also very blessed to have been in a position to be able to show that there's a role there for government in life, which is a positive role, and to see the results of it. The fact that the air is measurably cleaner, that any vehicle you would drive anytime you switch on your electricity in your home or your business, that is coming to you with a lot less pollution as a result of work that a lot of bureaucrats did to make that happen.

I also think though, that we've learned, in the years that I've been working in this field going back to the 70s, a lot more about how to work with markets and with industry than we did when we first started, that it's not just a matter of setting some numerical standard and then forcing everybody to beat it, that there are nuances and complexities to all of this that require talking to the regulated community. And in many instances, which we could go into in much more excruciating detail, that the regulations have to be written in

ways that allow them to be met with reasonable costs and with real benefits that people can see over time and that the government has to keep its eye on the ball to make that happen.

Jody Freeman:

I always say that we're sort of in a period of anti-government. You used the word bureaucrat. People feel very negatively about so-called bureaucrats as if they somehow are out of control and doing something that is unaccountable. And I think from your experience in government, both federal and state, I think you would agree that there's so much accountability that these agencies have. They have to answer to their political overseers, governor in one case, president in another case. They're responsive to the legislature, California state legislature. At the federal level, these agencies have to respond to Congress. They're hardly unaccountable. And these civil servants that I encounter at EPA and that I worked with from CARB, they work so hard every day to try to be faithful to the laws that Congress passed and deliver the public health benefits that Congress said they have to deliver to the American people that this counter-narrative has got to get into the mix more now. And I'm sure you observed, over the span of your career, the sort of rise of this anti-government posture. It sounds like you've sort of lived through that.

Mary Nichols:

Well, Ronald Reagan was probably the most successful advocate of that anti-government, government is the problem, government does all these ridiculous things. He was famous for his anecdotes about all of the mistakes that government supposedly makes. I think there are mistakes that government makes, but I also saw during my time, both at the federal level in the Clinton years where we had the reinventing government initiative led by then Vice President Al Gore, and in California over the years, that really smart, competent, well-educated, thoughtful, and reasonable people go into government because they want to do good. They actually are motivated by a strong desire to make the world a better place. We had a whole bunch at EPA of people who were former emergency workers, people who, in their spare time and earlier lives, had parachuted into disaster areas to help in emergency situations, who were attracted to the work of EPA because they could see that they were actually making a difference on the ground in people's lives.

So yeah, I am definitely in favor of the idea that we need a government that knows what it's doing and is competent, and that we need to be able to make corrections if we do things that are not right. One of the reasons why I think California, by the way, another plug for our state, but I'm going to put it in there, is that we've had the flexibility with administrative procedures that are protective but not so constraining that it takes years to pass a regulation once you decide that's needed. At the same time, if you need to make an adjustment, if you need to extend a deadline or tweak an emissions standard or change the way that you're measuring something, you can do that in a reasonable amount of time and avoid burdening the public with regulations that aren't doing the job that they were designed to do. So that's, I think one of the essential ingredients of maintaining public trust, is that while there may be the occasional screw up, most of the time, the programs deliver what they're supposed to be delivering.

Jody Freeman:

Yeah, that kind of regulatory flexibility, ability to adapt, we haven't talked about it, and we won't on this particular podcast, what we're likely to see from the Supreme Court this term, building on prior terms, restricting the federal government's ability to have that kind of adaptive approach to be flexible. But we're in an era, I fear in the moment, at the moment, where we're seeing the United States Supreme Court really try to restrict what the federal government can do by way of regulation. And I don't think it's in the interest of the American people. It's a court taking power for itself and depriving experts and agencies who are much more politically accountable than courts of the flexibility they need to do exactly what you just described, which is try to adopt smart regulations and work with industry to make sure they can comply. I'm very nervous about this.

It's June, and so I have to mention it. The court is about to announce what I fear are going to be more decisions of this kind. Before I let you go, what are you doing now? What's interesting you at the moment? You're here at Harvard for Climate Week. We're going to do a panel together, a plenary panel together on the future of climate policy a bit later today, but I nabbed you into the podcast studio to get you on an episode of CleanLaw, and I want to make sure people know what you're up to, what you're working on, and what your plans are.

Mary Nichols:

I am enjoying the opportunity to pick and choose more about what I spend my time on. I've ended up spending a fairly large amount of time dealing with environmental policy in China. And at the moment, there's a lot of playing defense there as well. But when my longtime boss, former governor Jerry Brown, left office after his fourth and definitely final term as governor, he founded an institute at the University of California called the California China Climate Institute, and I am the vice chair of the board of that entity. And because of that, I also went on the board of the Energy Foundation in China, which is pooling money from a number of large foundations and working with scholars and government agencies in China to promote strong climate policy. So that's been interesting and exciting work, especially for a person who doesn't speak a word of Chinese. So it's been a challenge, but it's also been tremendously interesting to learn something and to be able to have some impact on what is now the largest emitter of greenhouse gases in the world.

I'm also working at the national and international level on vehicle policy with a group called Reimagine Mobility, which is working on a variety of different measures designed to bring new technologies and new ideas into the world of transportation as we go forward. Exciting stuff, including rethinking the CAFE laws and other measures relating to fuel efficiency in vehicles. And I'm also hanging out at your former stomping grounds at UCLA, at the Emmett Center, where I've had a lot of fun working with the students in their clinical program on some interesting legislative initiatives in California that they've been able to help with, the most important and potentially the most influential, I think being the disclosure laws that are about to be implemented in the next year or two that for the first time are going to really set the standards for what kind of information companies have to disclose, not only about their own emissions of greenhouse gases, but also those of their suppliers and their workers.

I think this is going to lead to some very important and useful changes in the way private investors look at what kinds of things they're going to finance in this area.

Jody Freeman:

So as usual, California is in a leadership position on all of these policies. It's on disclosure law. They're probably overtaking the SEC's effort to promote disclosure and trying to match the EU. It sounds like you're very busy, but one thing you didn't mention, so I'm just going to ask it, are you going to write a book? I really want you to write a book.

Mary Nichols:

Well, I keep threatening to write a book. It's more than a threat. It's a serious commitment that I've made, but I'm struggling because it's always much easier for me to write a letter to a legislative committee or go on a podcast like this one.

Jody Freeman:

We're going to get you some UCLA law students, and maybe I'll get you some Harvard law students to help you write your memoir.

$N/I \cap N/I$	Nucha	10
iviai v	Nicho	15
,		

That would be very helpful.

Jody Freeman:

Mary, it's been a treat to have you. I'm just personally so grateful to you over all the years of knowing you. I admire you so much and for all your contributions to the public health and welfare of the people, not just of California, but of the country and the world. I really want to thank you. What an outstanding and impressive career, which is by no means over. So good luck in everything you're doing.

Mary Nichols:

Thank you. I'm counting on you and your students to keep it going.

Jody Freeman:

Thanks, Mary.